

NOTEBOOKS

FAQ

Q Will my notebook be able to play High Definition video?

A You'll need a display with a high enough resolution to handle High Definition (HD) content. Any notebook with a 15.4" widescreen display or larger will be able to do this. Running HD video on a screen with a lower resolution will work, but you won't see all the detail present in the video.

The hardware requirements for running 720p content vary considerably depending on the type of video compression used. It's further complicated by the differences between notebook and desktop processors. As a minimum, you should be able to play 720p video on a 1.6GHz Pentium M with 512MB of RAM. However, if you're buying a new notebook and HD video is important to you, get an Intel Core Duo processor.

If you want to test HD video on your notebook, try downloading examples from various sites such as www.apple.com/trailers or <http://tinyurl.com/oxf5o>.

Seth Barton

Notebooks and video expert



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ROCK Pegasus 550N

★★★★

£998 inc VAT

Rock's Pegasus 550N uses the same old chassis we've seen time and again from Rock and other manufacturers, but it's what's inside that counts. Rock has opted for Intel's Mobile 945PM Express chipset and a fast Intel Core Duo T2400 processor. Combined with 1GB of RAM, it's a powerful specification that pushed the Pegasus to produce excellent benchmark results.

In fact, this notebook will cope admirably with even tougher tasks than the ones we made it perform. The only disappointment is the Intel GMA 950 onboard graphics, which aren't good enough for playing the latest games.

The 15.4" widescreen display will help you get some serious work done. It has a big 1,400x1,050 resolution, so you'll have the space to view large spreadsheets or two applications side by side. Unfortunately, the screen is let down by its display quality. There is a mild graininess across the whole display, and whites have a slightly greenish tinge. Colours and greys were well graduated, however. It will suffice for office and day-to-day use, but there are better displays out there for photo manipulation and video viewing.

The keyboard is also unimpressive. The keys don't have enough travel for our liking, which makes typing difficult and tiring after a while. The touch pad isn't terribly accurate and the buttons don't provide as much feedback as we'd like. Neither is unusable, but they will cause frustration with regular use.

The chassis is slim and tapers to a point at the front. It weighs only 2.65kg, but it's not really suitable for



mobile use thanks to a battery life of less than three hours. There is a bit of flex across the body, which could become a liability if it took a nasty knock.

There are plenty of ports, including three USB2 ports and a memory card reader that supports MMC, SD and MS formats. A built-in webcam is fitted above the display, so you can easily use video chat or conferencing software.

Inside there's a DVD writer and a modest 60GB hard disk. We expect to see slightly larger hard disks in notebooks at this price, but office application users won't be bothered by the relative lack of space.

This is a very fast notebook with a high-resolution screen, so it will suit those who run demanding applications. Unfortunately, the average battery life and poor input devices make it impractical for long-term mobile use. There's nothing awful about this notebook, but we can't think who would benefit from its strengths while not caring about its weaknesses.

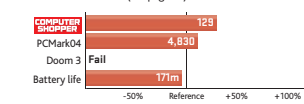
Seth Barton

SUMMARY

- ✓ Fast application performance
- ✗ Poor input devices
- ✗ Poor graphics performance

NOTEBOOK PC 1.83GHz Intel Core Duo T2400, 1GB RAM, 60GB hard disk, Intel GMA 950 graphics, DVD+/-RW DL drive, 15.4" widescreen LCD, weighs 2.65kg
SUPPLIER Rock 08709 909090
DETAILS www.rockdirect.com

PERFORMANCE (see page 58)



Also consider...

HP Pavilion dv5094EA

★★★★★

£799 inc VAT



HP's Pavilion dv5094EA notebook won our £799 group test in *Shopper* May 2006. It's a great notebook for use around the home. The chassis is well built and the keyboard and touch pad are both a pleasure to use. The display is outstanding: it's bright and reproduces colours accurately.

The Pavilion has a good range of ports, including a memory card reader, which is very convenient for digital camera users. Inside there's a massive 100GB hard disk for storage plus a DVD writer for backups. It performed respectably in our *Shopper* benchmarks, scoring strongly in our image-manipulation test. Battery life is just over three hours, which is easily enough for use around the home. It's not equipped to play the latest games, though. This notebook is well



designed and provides more than enough power for day-to-day tasks. It's particularly suitable for anyone with an interest in digital photography.

NOTEBOOK PC 2.0GHz AMD Turion 64 ML-37, 1GB RAM, 100GB hard disk, ATI Mobility Radeon Xpress 200 graphics, DVD+/-RW DL, 15.4" widescreen LCD, weighs 3.1kg SUPPLIER www.johnlewis.com PART CODE ET038EA#ABU DETAILS www.hp.com/uk ✓ Great display; good input devices; huge hard disk ✗ Big chassis FULL REVIEW May 2006

FUJITSU SIEMENS Amilo M 6450G

★★★★

£699 inc VAT

Intel's Core Duo and Core Solo processors may have grabbed the limelight, but the older Pentium M processors are still pretty fast. They're also a little cheaper, which makes them a good choice for budget notebooks, such as Fujitsu Siemens' Amilo M 6450G.

Fujitsu Siemens has opted for a Pentium M 735 processor, which runs at 1.7GHz. However, it's one of the older range of processors, with a 400MHz frontside bus. Later Pentium Ms have a 533MHz bus, which improves system performance and memory access.

This explains the Amilo M 6450G's benchmark results, which showed it to be a little slow in our application tests. We've seen plenty of faster notebooks at this price, and some manufacturers even offer dual-core processors. The 6450G will coast through day-to-day tasks, though, and office applications and web browsing will be no problem.

Battery life was also unexceptional and fell a little below our preferred three hours of light use. Don't expect to play games, either, as the Intel GMA 900 graphics chipset failed in our benchmarks. It's not all bad news, though. The 80GB hard disk is generous in a notebook at this price, as is the two-layer DVD writer.

Notebook computers are not just about performance, however; design and usability are equally important. Here the Amilo M 6450G fares better. Its chassis is compact and designed around a 14" widescreen display. It's the perfect size for mobility, but the mediocre battery limits its usefulness.

The screen is quite bright but had a bluish tinge when displaying



a white screen. Its gloss coating makes it good for watching films and looking at pictures, and there's no noticeable grain on the screen to detract from the image. Colours weren't the most vibrant we've seen on a notebook computer, but they were well blended in our colour wheel test.

The keyboard is better still, as it uses the whole width of the chassis. This makes it spacious and means that all the keys are an acceptable size. The individual keys are firm to the touch and have a decent amount of travel. It's a great keyboard and a real pleasure to type on. The touch pad is proportioned to the widescreen display. It could have been a little bigger, but it's accurate and the buttons are responsive.

There's the usual range of ports around the edges, but only three USB2 ports are provided. However, it also has a memory card reader that supports SD, MS and MMC formats.

There's little wrong with the 6450G, but you can get a better-specified notebook at this price, such as Dell's Inspiron on page 18.

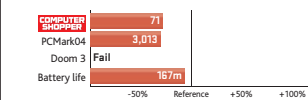
Seth Barton

SUMMARY

- ✓ Great keyboard
- ✓ Good display; compact chassis
- ✗ Below-average battery life

NOTEBOOK PC 1.7GHz Intel Pentium M 735, 512MB RAM, 80GB hard disk, Intel GMA 900 graphics, DVD+/-RW +/-DL drive, 14" widescreen LCD, weighs 2.4kg
PART CODE BAT:UK-N5PXM05-M1
SUPPLIER www.microanvika.com, 020 7467 6050
DETAILS www.fujitsu-siemens.co.uk

PERFORMANCE (see page 58)



BYTE SIZE

Just Friends

★★

£11 inc VAT



DVD Chris (Ryan Reynolds) was the fat kid in school who, 10 years later, still carries a torch for his best friend Jamie (Amy Smart). When he finds himself back in his hometown – handsome, successful and with a pop star in tow – he realises this is his chance to win Jamie's heart. But will he ever get out of the dreaded 'friend zone'? Most viewers will be able to guess.

Director Roger Kumble packs his cast with talented comic performers and then gives them virtually nothing to do, letting the film coast on Reynolds' dubious charms. *Just Friends* has funny bits but is childish and occasionally unpleasant. It comes with endless making-of featurettes.

Chris Miller

SUPPLIER www.sendit.com

ENERMAX Laureate EB305C-S

★★★★★

£33 inc VAT



Enernax's Laureate EB305C-S turns a spare disk into an external USB hard disk.

The Laureate feels tough thanks to its aluminium case. Installing a 3½" hard disk is easy: pop the front off using the tool provided and slide the top panel out of the way.

The Laureate supports ATA and SATA hard disks. You just change the internal cables to move from ATA to SATA. Performance over the USB Hi-Speed interface is what we'd expect.

It's very well priced, and the fact that you can change the hard disk interface makes it suitable for everyone.

David Ludlow



SUPPLIER www.pixmania.co.uk
DETAILS www.enernax.com

ACER Aspire 5672WLMi

★★★★★

£1,029 inc VAT

PRICE CUT!



Acer's 5672WLMi was the first notebook we tested with an Intel Core Duo processor. This new dual-core processor makes it one of the fastest notebooks available. When running simultaneous applications it really shines, eclipsing the performance of equivalent Pentium M notebooks.

The rest of the specification is equally impressive. There's a generous 2GB of RAM and a huge 120GB hard disk. The ATI Mobility Radeon X1400 is good enough for playing the odd game and the 15.4" widescreen display is bright and colourful.

The chassis is quite slim, especially given all the power it contains, and weighs less than 3kg. Battery life is impressive, too, making the Aspire



5672WLMi an ideal notebook for those who want plenty of performance when they're on the move.

If you want a deluxe notebook with tons of processing power, then it's ideal.

NOTEBOOK PC 1.66GHz Intel Core Duo T2300, 2GB RAM, 120GB hard disk, 256MB ATI Mobility Radeon X1400 graphics, DVD+/-RW DL drive, 15.4" widescreen LCD, weighs 2.95kg PART CODE LX.A8505.026 SUPPLIER www.acernotebooks.co.uk, 0870 167 0819 DETAILS www.acer.co.uk
✓ Latest dual-core processor, excellent 2D performance ✗ Graphics performance not as good FULL REVIEW Apr 2006

BYTE SIZE

ARCTIC COOLING Freezer 64 Pro

★★★★★
£13 inc VAT



Arctic Cooling's Freezer 64 Pro is the Socket 939 equivalent of the Socket 775 Freezer 7 Pro, which won a Best Buy award in last month's Quiet PC Labs test. Fitting the cooler is easy: simply clip both sides to the motherboard's heatsink mount and lower the lever into place.

The heatsink kept our test AMD Athlon 64 3500+ processor at 39°C under load, compared to the stock AMD Socket 939 cooler's 47°C. The fan spins at a relatively slow 2,200rpm and its flexible mounts reduce vibration, so the fan is significantly quieter than the stock cooler. It's a quiet and effective heatsink at an excellent price.

Chris Finnamore

SUPPLIER www.scan.co.uk
DETAILS www.arctic-cooling.com

NORTEK Wireless Desktop D-Sign

★★★★★
£35 inc VAT



Nortek's Wireless Desktop D-Sign is a wireless keyboard and mouse set. The keyboard has low-profile keys, so it's similar in feel to a notebook's keyboard. The keys have a slightly clicky action, but feedback is good enough for accurate typing. The rows of keys are not staggered in height, which makes it easier to hit two keys at once. Short-cut keys are dotted around, and do everything from controlling volume to launching Office applications.

The laser mouse has a bulge on the side, making it slightly uncomfortable to hold, but pointer movement is quite accurate. The mouse is not the best, but the keyboard is impressive for the price.

Chris Finnamore

SUPPLIER www.dabs.com
DETAILS www.nortekonline.com

DELL Inspiron 6400

★★★★★
£699 inc VAT



Buying a cheaper notebook usually means making sacrifices, but Dell's Inspiron 6400 has few compromises and some surprises.

First, there's the 15.4" widescreen display. The quality and size of a notebook's display is key to an enjoyable experience, so we were most pleased to discover that the Inspiron's display has a massive 1,680x1,050 resolution. This gives you approximately 70 per cent more desktop space than the more common 1,280x800 version, making it ideal for those who use two applications at once or work on large spreadsheets.

The quality of the display isn't perfect, though. It has a slight graininess across the entire screen, which detracts a little from the fine detail it can display. It has a gloss coating to increase contrast, though, and our colour and greyscale tests looked good, so it will suit movie fans and digital photographers.

With that in mind Dell has included a memory card reader that supports all the usual formats and even xD. There are also four USB2 ports provided for connecting peripherals. The usual wired and wireless networking options are enhanced by the addition of Bluetooth for connecting mobile phones, PDAs and other peripherals.

The keyboard is a good size, but the keys could be a little firmer. The touch pad is large and accurate, with handy scroll areas on the bottom and right-hand side. Unfortunately, Dell has put large and spongy buttons below the touch pad that have no distinct action or feedback. The front of the chassis has a set of media playback buttons, which nestle between a pair of loud and capable speakers.



The Inspiron performed well thanks to an Intel Core Duo T2300 processor. The processor's two cores provide excellent performance in compatible applications, allowing it to hurtle through our video-encoding test with a score of 156. The notebook has only 512MB of RAM, so it didn't fare quite so well in our photo-manipulation test. An overall score of 102 is very respectable for a notebook at this price, however.

The notebook lasted an excellent four hours and 18

minutes in our light-use test, which is perfect for computing on the move or simply spending an afternoon in the garden. At almost 3kg it isn't the lightest notebook to carry around, though.

The 6400 really impressed us, as we didn't think it possible to get a high-resolution display and an Intel Core Duo processor for under £700. There are a couple of minor issues with the display and keyboard, but this notebook is a real bargain with plenty to offer. Make sure you use the E-Value code (left) to get the correct specification when ordering.

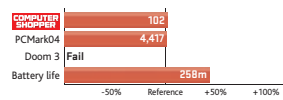
Seth Barton

SUMMARY

- ✓ Hi-res display; dual-core processor
- ✓ Great battery life
- ✗ Keyboard could be better

NOTEBOOK PC 1.66GHz Intel Core Duo T2300, 512MB RAM, 60GB hard disk, Intel GMA 950 graphics, DVD+/-RW DL drive, 15.4" widescreen LCD, weighs 2.9kg
E-VALUE CODE PPUK5-N05645r
SUPPLIER Dell 08701 524699
DETAILS www.dell.co.uk

PERFORMANCE (see page 58)



Also consider...

ROCK Xtreme CT 2.0GHz

★★★★★
£1,408 inc VAT

Rock's Xtreme CT 2.0GHz lets you play the latest games without the need for a bulky desktop computer. The nVidia GeForce Go 7800 GTX graphics chipset provides blistering frame rates in all the latest and most demanding games. It stormed through our standard Doom 3 test with a score of 85.2fps. The excellent 17" widescreen display works best with compatible titles such as Call of Duty 2.

The Xtreme CT 2.0GHz has a fast 2GHz Pentium M processor and 1GB of RAM, which helped it achieve a respectable 92 overall in our benchmarks. The 60GB hard disk is a little on the small side, though, so you'll have to delete unused games regularly. The battery

life is a paltry 95 minutes, but that's to be expected when you have this much graphical muscle.

The Rock is a well-designed and powerful notebook that is ideal for gamers.



NOTEBOOK PC 2GHz Intel Pentium M 760, 1GB RAM, 60GB hard disk, nVidia GeForce Go 7800 GTX graphics, DVD+/-RW DL, 17" widescreen LCD
SUPPLIER Rock Direct 08709 909090
DETAILS www.rockdirect.com
PART CODE XCT-2.0
Great 3D performance, excellent 17" widescreen display
Small hard disk
FULL REVIEW Feb 2006

BYTE SIZE

SWEEX USB Speaker Set 120 Watt

★★★★★
£12 inc VAT



These speakers are powered from a USB port, and there's a built-in sound card for a simple audio upgrade.

The sound quality isn't outstanding and is concentrated on the mid-range. However, they sound much better than most

notebook speakers. Volume is restricted by the limited power available from a USB port, but again it's much louder than most notebooks.

For good audio quality, check out Logitech's V20 reviewed in *What's New, Shopper* May 2006. But for £12, these speakers do a decent job at a very low price.

Seth Barton

SUPPLIER www.redstore.com
DETAILS www.sweeurope.com

BELKIN Wireless Desktop 280

★★★
£25 inc VAT

Wireless keyboards and mice keep your desk free of clutter but tend to cost more, so we were impressed with the low price of the Wireless Desktop 280.

Unfortunately, it's not very good. The keyboard looks and feels cheap, and the keys give little feedback. It's also overloaded with 34 short-cut buttons, which make it confusing. The mouse is better, proving accurate and responsive. It also has too many short-cut buttons, making it look cluttered.

Neither device is rechargeable. The price is excellent, but the quality is below average, so we'd advise you to spend a bit more on a better set.

Seth Barton

SUPPLIER www.dabs.com
DETAILS www.belkin.com/uk

CHOOSING A... Notebook Computer

Follow the steps to find your ideal specs

PROCESSOR: AMD Mobile Sempron 3000+
MEMORY: 512MB DDR
HARD DISK: 40GB
STORAGE: DVDewriter
GRAPHICS: Integrated (using system memory)
SCREEN: 1,024x768 LCD
EXTRAS: Wireless networking
CONNECTORS: Three USB2, network, modem
SOFTWARE: Windows XP Home Edition
WEIGHT: 3kg
Recommended minimum in grey

1 The minimum specification of notebook we recommend, shown above in grey, is a good starting point when working out your ideal system. This is an average notebook that should cost around £600. It is not particularly powerful or, at 3kg, particularly portable. Mobile processors increase the battery life and are now fairly common, even at this price.

2 Most people want a better notebook than the bare minimum – but what is your definition of better? Do you want something that's more powerful, or lighter and better-looking? Desktop replacement notebooks, which approach the power of a full-size PC, are necessarily large to accommodate the extras. These usually include a desktop processor and larger battery to keep the whole lot running for any length of time.

3 If portability is your main priority, keep the specification modest (a Pentium M 1.7GHz, say) but spend more. This will buy you an executive notebook with the kind of cutting-edge design required to miniaturise without compromising usability. Clever chassis, expensive batteries and the finest materials are prerequisites for superior ultra-portable notebook PCs.

4 There are features you can add to a notebook without piling on weight or reducing battery life. A 60GB, 80GB or 100GB hard disk and 1GB of RAM won't hurt. Another possibility is an external drive that you can carry with you or leave at home according to the nature of your trip. Some ultra-portables can attach to an optional docking station, which incorporates drives, ports and extra power for when you need it. It's the best of both worlds, but tends to be expensive.

5 If you're not swayed by ultra-portable chic, you can get a lot more for your money. Today's desktop replacements pile on the features but still keep the price under £1,200. Alternatively, go for a balanced package: middling power and price in a reasonably portable package. Which notebook you pick depends on how much power and which features you need, so consider each in turn.

6 Notebooks run the same software as desktop PCs, so our advice on the core specification is the same (see page 14). However, hard disks go up to only 120GB and even the best notebook graphics lag slightly behind desktops.

7 DVDewriter drives are now standard and will allow you to burn CDs and DVDs on the move. If you want to watch movies, consider buying a notebook with a widescreen display.

8 A 1,024x768 screen is the entry level these days, but its size will depend on the notebook's purpose. Ultra-portables might have screens as small as 9". Widescreen displays have resolutions of 1,200x768 upwards but make for a bulkier notebook.

9 A modem and regular 10/100 Ethernet port should come as standard. We also consider wireless 802.11b or 802.11g networking (WiFi) to be essential, and it's becoming increasingly popular on all models. FireWire (IEEE-1394) and Bluetooth can be added to the default TV out and USB2 ports. Memory card readers are extremely common, so check that your camera or MP3 player's format is supported.

10 Once you're happy with your specification, start to shortlist some models you can afford. Check the weight and battery life of each of them. If these are not acceptable, you need to reconsider how much power and which features you really need.

